



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

February 28, 2011

Mr. Chris Carlson
Chief Financial Officer
Vertex Energy, Inc.
1331 Gemini Street; Suite 250
Houston, TX 77058

**Re: Vertex Energy, Inc.
Form 10-K for the year ended December 31, 2009
Form 10-Q for the period ended September 30, 2010
File No. 0-53619**

Dear Mr. Carlson:

We have reviewed your response letter dated February 22, 2011 and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

FORM 10-Q FOR THE PERIOD ENDED SEPTEMBER 30, 2010

Item 1. Financial Statements

Note 9 – Licensing Agreement, page F-10

1. We note your responses to comments one, two, four and seven from our letter dated February 2, 2011. Please address the following:
 - Tell us how you considered ASC 350-30-35 in determining that the licensing agreement intangible asset should not be amortized over the period from acquisition (September 2009) to expiration of the license agreement (February 28, 2017);

- You indicate that the annual maintenance costs for the technology are approximately \$400,000. It appears that your annual maintenance costs are material in relation to the original carrying amount of the licensing agreement which suggests a very limited useful life. Furthermore, ASC 350-30-350-3(f) indicates that enhancements should not be assumed when determining the useful life of an intangible asset. Please tell us how you determined a 15 year life was reasonable in light of these factors;
 - Please provide us with a copy of the third party appraisal used to substantiate the fair value of the licensing agreement;
 - To the extent that the \$1.4 million purchase price for the licensing agreement includes the value attributed to the actual thermal/chemical extraction technology and the value attributed to the underlying physical infrastructure used to process the finished product, please quantify for us the value associated with licensing agreement separate from the value associated with the underlying infrastructure; and
 - It appears that most of the costs capitalized to your licensing agreement during fiscal 2010 pertain to new equipment and/or replacements added to the infrastructure for your thermal/chemical extraction. Please tell us how you considered if these costs should have been recorded as maintenance expenses and/or capitalized as property, plant and equipment rather than capitalized as additions to the licensing agreement intangible asset. Please also provide us with a similar analysis for the costs (approximately \$300,000) which were added to your licensing agreement intangible asset during 2009 after the asset's acquisition.
2. We note your response to comment two from our letter dated February 2, 2011. It appears that the profitability of your thermal/chemical extraction business decreased significantly during the nine months ended September 30, 2010 compared to the year ended December 31, 2009. A current period operating loss combined with a history of operating losses is considered an event that would indicate the recoverability of your intangible asset should have been tested for impairment as of September. Please tell us how you considered ASC 350-50-35-14 in determining it was not necessary to perform an impairment analysis of the license agreement as of September 30, 2010. Please also provide us with the financial projections used in your appraisal of the license agreement and compare those projections to your actual results through September 30, 2010. To the extent that your actual results have fallen short of your projections, please tell us why you did not consider this an indicator that an impairment analysis should have been performed as of September 30, 2010.

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You may contact Lisa Etheredge, Staff Accountant at (202) 551-3424 or Jeanne Baker, Assistant Chief Accountant at (202) 551-3691 if you have questions regarding comments on the financial statements and related matters. Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or Dietrich King, Staff Attorney at (202) 551-3338 with any other questions.

Sincerely,

Rufus Decker
Accounting Branch Chief